

# MediaTek MT6765 Helio P35 Processor

CPU: 4 x Cortex-A53 up to 2.3GHz / 4 x Cortex-A53 up to 1.8GHz  
 Graphics: IMG GE8320 up to 680MHz  
 Memory: 1 x LP3 933MHz, up to 4GB / 2 x LP4x 1600MHz, up to 6GB / eMMC 5.1  
 Camera: 25MP @ 30fps w/ ZSD/13MP + 13MP @ 30fps (LP4X) / MIPI  
 Lane: 4+4+4 / 4+4+2+2 / HW dual cam  
 Video Dec.: 1080p 30fps H.264/H.265  
 Video Enc.: 1080p 30fps H.264  
 Display: FHD+ (2400x1080)  
 Modem: Cat-7, L+L  
 Connectivity: MT6631 (+11.ac + BT 5.0 + Galileo)

Low Power  
 A53 core, 15% less power consumption than A57



-15% power consumption Cortex-A57



## » MT6765 Application

MT6765 has high performance and low power consumption, ideal for industrial PDA and industrial tablet applications.



Store management



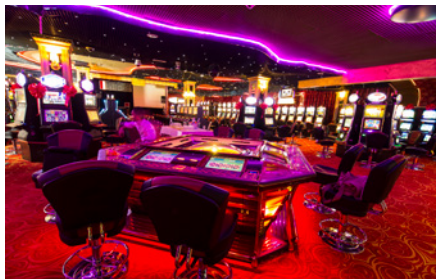
Express delivery and logistics



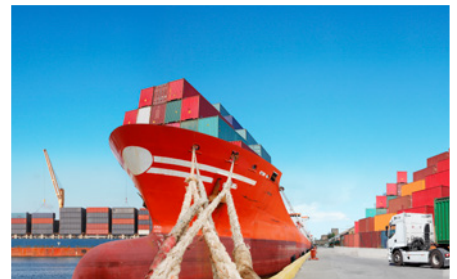
Manufacturing



Retail



Dining and entertainment



Port and pier

# Mobile Tablet PC Selection Guide



Model		MODAT-800A
Display and Touch	LCD Size	8"
	Brightness (cd/m <sup>2</sup> )	500
	Max. Resolution	1280 x 800
	Viewing Angle	85°/85°/85°/85°
	Touchscreen	5-point PCAP touch (Surface hardness 6H)
	Contrast	800:1
System	CPU	MediaTek MT6765 Helio P35 Octa-core 64-bit Cortex-A53 2.3 GHz
	Operating System	Android 11
	Memory	6GB LPDDR4
	ROM	128GB eMMC
Communication	WLAN	802.11 a/b/g/n and ac (2.4GHz/5GHz)
	Bluetooth	Bluetooth v5.0+EDR
	Modem	GSM: B2/1900;B3/1800;B5/850;B8/900 3G: WCDMA (B1/2100;B5/850;B8/900); EVDO (BC0); SCDMA 4G LTE: FDD-LTE (B1/2100;B3/1800;B7/2600;B20/800;B2/1900;B4/AWS;B5/850;B8/900;B12/700;B17/700b;B13/700c) TDD-LTE (B38, B39, B40, B41)
	GNSS	GPS/BeiDou/GLONASS/Galileo (Could be 2 kinds of the 4; Default: GPS and BeiDou)
Data Collection	NFC	ISO/IEC 14443A/B MIFARE JIS X 6319-4 (FeliCa1) ISO/IEC 18092 ISO/IEC 15693
	Camera	13-megapixel auto focus rear camera with LED flash 5-megapixel front-facing camera
	Fingerprint	MODAT-800A-MT65-R10: fingerprint lock MODAT-800A-MT65-A-R10: FBI-certified fingerprint reader MODAT-800A-MT65-B-R10: CNAS-certified fingerprint reader
Sensors	3D accelerator GYRO-Sensor Electronic compass proximity sensor ambient light sensor	
Battery Status LED	Red/Green (Red light shows the battery is being charged; Blinking red light shows the battery is low <15%; Green light shows the battery is full >90%)	
Buttons	(1) Power button, Volume up, Volume down (2) 2 programmable buttons (3) PCAP buttons: Home, Menu, Back	
I/O Interface	Audio	2 x 1.5W speaker 1 x 3.5 mm audio jack for headset 1 x Receiver microphone 2 x Analog microphone
	USB	USB OTG 2.0 by either USB Type-C connector or USB Type-A connector
	Charging Interface	USB Type-C
	SIM Card / SD Card Slot	Dual Nano SIM card (dual standby) or one Nano SIM + one microSD up to 64GB
	Power Adapter	Optional: 20W USB Type-C wall charger compatible with USB Power Delivery 3.0 Input: 100-240V, 50/60Hz, 0.5A Output: 5V@3A, 9V@2A, 12V@1.5A (20W max.)
	Battery	16,000mAh Li-Polymer Battery (59.2Wh, 3.7V)
Environmental	Operating Temperature	0°C ~ 50°C for discharging, and active CPU throttling at a higher temperature 0°C ~ 40°C for charging, and 16°C ~ 40°C for fast charging
	Storage Temperature	-20°C ~ 60°C
	Drop Survival	1.2 meter
	IP Level	IP54
	Color	Case: Pantone Black C and Pantone Medium Blue C Touch screen: Pantone Black C and Pantone 431C
	Dimensions (L x W x H)	277.32 x 159.76 x 27.61 (mm)
Power Input	Weight	1 kg
EMC and Safety		Conform to CE/FCC ESD: ±10KV AIR; ±6KV CONTACT

PRELIMINARY

# MODAT-800A

8" IP54 Rugged Android Tablet PC



## Features

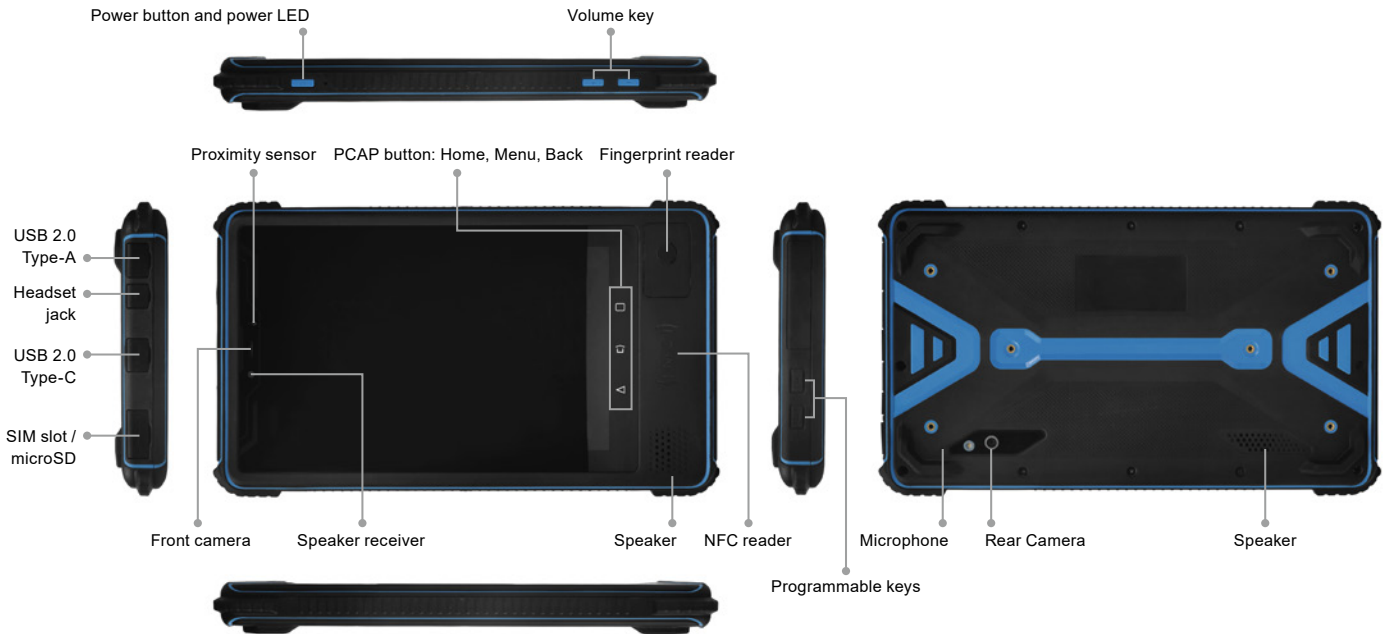
- 8" 1280 x 800 screen with 500nits brightness for outdoor applications
- IP54 waterproof dustproof, ideal for wild use and field work in harsh conditions
- MediaTek MT6765 octa-core 64-bit Cortex-A53 2.3 GHz processor
- 16, 000 mAh Li-ion battery, and the extraordinary low power consumption design, allowing full-day use in the field, without worrying about data loss
- Biometric lock, FBI- or CNAS-certified fingerprint reader
- USB Type-C fast charging, USB PD 3.0 compliant
- Built-in 4G LTE, dual-band Wi-Fi AC, GPS navigation, Bluetooth v5.0 and NFC
- Android 11



## Specifications

Model		MODAT-800A	
Display and Touch	LCD Size	8"	
	Brightness (cd/m <sup>2</sup> )	500	
	Max. Resolution	1280 x 800	
	Viewing Angle	85°/85°/85°/85°	
	Touchscreen	5-point PCAP touch (Surface hardness 6H)	
	Contrast	800:1	
System	CPU	MediaTek MT6765 Helio P35 Octa-core 64-bit Cortex-A53 2.3 GHz	
	Operating System	Android 11	
	Memory	6GB LPDDR4	
	ROM	128GB eMMC	
Communication	WLAN	802.11 a/b/g/n and ac (2.4GHz/5GHz)	
	Bluetooth	Bluetooth v5.0+EDR	
	Modem	GSM: B2/1900;B3/1800;B5/850;B8/900 3G: WCDMA (B1/2100;B5/850;B8/900); EVDO (BC0); SCDMA 4G LTE: FDD-LTE (B1/2100;B3/1800;B7/2600;B20/800 ;B2/1900;B4/AWS;B5/850;B8/900;B12/700;B17/700b;B 13/700c) TDD-LTE (B38, B39, B40, B41)	
	GNSS	GPS/BeiDou/GLONASS/Galileo (Could be 2 kinds of the 4; Default: GPS and BeiDou)	
Data Collection	NFC	ISO/IEC 14443A/B MIFARE JIS X 6319-4 (FeliCa1) ISO/IEC 18092 ISO/IEC 15693	
	Camera	13-megapixel auto focus rear camera with LED flash 5-megapixel front-facing camera	
	Fingerprint	MODAT-800A-MT65-R10: fingerprint lock MODAT-800A-MT65-A-R10: FBI-certified fingerprint reader MODAT-800A-MT65-B-R10: CNAS-certified fingerprint reader	
Sensors		3D accelerator GYRO-Sensor Electronic compass proximity sensor ambient light sensor	
Battery Status LED		Red/Green (Red light shows the battery is being charged; Blinking red light shows the battery is low <15%; Green light shows the battery is full >90%)	
Buttons		(1) Power button, Volume up, Volume down (2) 2 programmable buttons (3) PCAP buttons: Home, Menu, Back	
I/O Interface		Audio	2 x 1.5W speaker 1 x 3.5 mm audio jack for headset 1 x Receiver microphone 2 x Analog microphone
		USB	USB OTG 2.0 by either USB Type-C connector or USB Type-A connector
		Charging Interface	USB Type-C
		SIM Card / SD Card Slot	Dual Nano SIM card (dual standby) or one Nano SIM + one microSD up to 64GB
Power		Power Adapter	Optional: 20W USB Type-C wall charger compatible with USB Power Delivery 3.0 Input: 100-240V, 50/60Hz, 0.5A Output: 5V@3A, 9V@2A, 12V@1.5A (20W max.)
		Battery	16, 000mAh Li-Polymer Battery (59.2Wh, 3.7V)
Enviroments		Operating Temperature	0°C ~ 50°C for discharging, and active CPU throttling at a higher temperature 0°C ~ 40°C for charging, and 16°C ~ 40°C for fast charging
		Storage Temperature	-20°C ~ 60°C
		Drop Survival	1.2 meter
		IP Level	IP54
		Color	Case: Pantone Black C and Pantone Medium Blue C Touch screen: Pantone Black C and Pantone 431C
Physical		Dimensions (L x W x H)	277.32 x 159.76 x 27.61(mm)
		Weight	1kg
EMC and Safety		Conform to CE/FCC ESD: ±10KV AIR; ±6KV CONTACT	

### Fully Integrated I/O



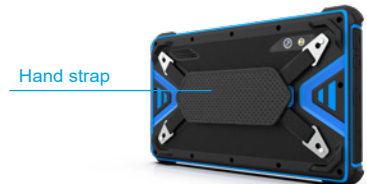
### Ordering Information

Part No.	Description
MODAT-800A-MT65-R10	8" Android 11 tablet PC with Octa-core Cortex-A53 2.3GHz processor, Wi-Fi 802.11ac/a/b/g/n, Bluetooth 5.0, GPS, 5-megapixel front and 13-megapixel rear camera, 6GB LPDDR4, 128GB eMMC, NFC, unlock fingerprint, R10
MODAT-800A-MT65-A-R10	8" Android 11 tablet PC with Octa-core Cortex-A53 2.3GHz processor, Wi-Fi 802.11ac/a/b/g/n, Bluetooth 5.0, GPS, 5-megapixel front and 13-megapixel rear camera, 6GB LPDDR4, 128GB eMMC, NFC, FBI-certified fingerprint, R10
MODAT-800A-MT65-B-R10	8" Android 11 tablet PC with Octa-core Cortex-A53 2.3GHz processor, Wi-Fi 802.11ac/a/b/g/n, Bluetooth 5.0, GPS, 5-megapixel front and 13-megapixel rear camera, 6GB LPDDR4, 128GB eMMC, NFC, CNAS-certified fingerprint, R10



### Optional Accessory List

Item	Part No.	Description
Hand strap	19XMOSFB6-0006002-000-RS	Hand strap for MODAT-800 (155.6x56) + Screw
Desktop Stand	19XMOSFB6-0006001-000-RS	Support frame+Screw



### Packing List

Item	Part No.	Q'ty
63040-430020-010-RS	Power Adapter: Vin: 90~264VAC;20W;CCC, Erp (NO LOAD 0.1w); Vout: 5VDC/9VDC: USB Type-C	1
32001-030300-100-RS	Type C cable :ROUND USB CABLE, 2;1200mm;TYPE C MALE*2, Huntkey	1
45030-0049C0-00-HF	Sim Card Tray Ejector Eject Pin key Removal Tool	1



### MODAT-800A Dimensions

(Unit: mm)

